

REMARKS

This Amendment is in response to the Office Action dated November 30, 2006, in which claims 1-16 and 19-31 were rejected and claims 17 and 18 were objected to but indicated as containing allowable subject matter. With this Amendment, claims 1, 3-5, 8, 9, 11, 12, 14, 15, 19, 21, 23-27, 29, and 30 are amended, claims 16-18 are canceled, and new claims 32-39 are added. Claims 1-15, and 19-39 are presented for reconsideration and allowance.

In the Office Action, claims 1-16 and 19-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tapperson et al. (U.S. Patent No. 6,236,334) in view of Petite et al. (U.S. Patent No. 7,053,767). With this Amendment, each of the independent claims 1, 8, 14, 19, 21, 23, 26, and 29 has been amended to clarify that the present invention involves a wireless communication network of field devices within an industrial plant, where the field devices are powered from a plant-wide power bus. As amended, claims 1-15 and 19-31 are neither taught nor suggested by Tapperson, Petite, or a combination of those two references. Neither Tapperson nor Petite suggest the use of a plant-wide power bus to provide electrical power to field devices distributed throughout an industrial plant. In Tapperson, power is delivered from the control room through a controller over a communication bus 64 or 90 to a controller 62 or 88. Power from the controller 62 is then provided over a field bus control network 74 or 84 or a field bus distribution network 96. Thus, the system shown in Tapperson uses the communication bus, over which data is transmitted to also deliver power from the control room to the various field devices.

Petite shows systems that include sensor/actuators and transceivers which communicate with a local gateway. The local gateway communicates through a wide area network, such as the Internet or an Intranet to a server, workstation, or laptop computer. Petite does not teach an industrial process control system having field devices that are powered by a common plant-wide power bus.

With this Amendment, claims 1-15 and 19-31 have been placed in condition for allowance. Withdrawal of the rejection under 35 U.S.C. § 103 and allowance of the claims is requested.

In the Office Action, claims 17 and 18 were objected to as depending from a rejected claim, but were indicated as being allowable if rewritten in independent form. Claim 17 and 18 have been canceled and rewritten as new independent claims 32 and 33. Thus, claims 32 and 33 are in condition for allowance.

New claims 34-39 have also been added. Claim 34 is similar to original claim 1, but requires that each of the field devices communicate wirelessly with the control/monitoring center through a self organizing wireless network. In addition, claim 34 requires that a common power bus deliver power to each field device. Independent claim 34 and dependent claims 35-39 are neither taught nor suggested by Tapperson and Petite. Allowance of these claims is also requested.

In conclusion, the present Amendment has placed this application in condition for allowance. Reconsideration and allowance of claims 1-15 and 19-39 is requested.

Respectfully submitted,

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